Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications Framework for Next Generation 911 Deployment	PS Docket No. 11-153 and 10-255

COMMENTS OF FAIRFAX COUNTY, VIRGINIA
ON SECTIONS OTHER THAN III.A

The County of Fairfax, Virginia, submits these comments in response to the Further Notice of Proposed Rulemaking to Facilitate the Deployment of Text-to-911 and Other Next Generation 911 Applications ("Text-to-911 FNPRM") adopted by the Commission on December 12, 2012. The Text-to-911 FNPRM solicited comment on proposed rules that will enable individuals to send text messages to 9-1-1 ("text-to-911") and that will educate and inform consumers about the future availability and appropriate use of text-to-911. In accordance with the bifurcated comment deadlines established by the Commission, Fairfax County commented on Section III.A in a January 29, 2013, submission to the Commission. Fairfax County's comments here respond to other sections of the Text-to-911 FNPRM. Specifically, Fairfax County comments herein on (1) the Commission's proposal to provide a set of four near-term options that enable non-NG911-capable Public Safety Answering Points ("PSAPs") to accept text messages transmitted by wireless carriers or interconnected text providers, and (2) the Commission's proposal that the Phase II E9-1-1 location accuracy requirements not apply to the initial implementation of text-to-911.

I. PSAP Options for Receiving Text-to-911 Messages.

Fairfax County's PSAP cannot currently accept 9-1-1 messages sent via text. The County cannot predict when a transition from current 9-1-1 to NG9-1-1 will occur because the initial planning for a transition to NG9-1-1 is just beginning in Virginia. Therefore, the County strongly supports the Commission's decision to leave to PSAPs the decision whether to accept text-to-911 messages and, if PSAPs decide to accept such messages, the ability to select the format in which they will receive text messages. (Text-to-911 FNPRM ¶¶ 47 & 127-143.)

Of the four options by which the Commission proposed that non-NG911-capable PSAPs could receive text-to-911 messages, Fairfax County supports the Text-to-TTY Translation option as the most economical and least disruptive method for Fairfax County to receive text messages in the interim period between today's PSAP operations environment and when fully robust NG911 systems are in place in Fairfax County in the future. (See Text-to-911 FNPRM ¶¶ 138-141.) The primary reason the Text-to-TTY Translation option provides a superior interim solution for Fairfax County is that the existing business processes and considerable parts of the required technical infrastructure for the interface already are in place on the operations floor at every call taking workstation. Call takers are very familiar with the processes used to receive TTY messages today and we assume the solution offered by the carriers to receive text-to-911 messages will be virtually the same in its look and feel, thus minimizing the impact on call taking staff. Their familiarity with current equipment and procedures should allow call takers to respond to the emergency request being texted more easily using known equipment and procedures. The existing TTY interface also takes advantage of the established direct linkage between TTY call information data and the Computer Aided Dispatch (CAD) system, facilitating the entry and mapping of the texter's phone number and location. The existing systems that are

used to manage TTY conversations also provide a built-in capacity to record the details of the text message conversation and to later search the messages should the need arise for investigative purposes. Moreover, the existing systems that support TTY conversations are on a closed secure network within the Fairfax County PSAP, and thus provide the necessary security and privacy of information.

Another important advantage of the Text-to-TTY option is that it supports direct communication between the sender of the text message and the PSAP. Direct communication between the sender and the PSAP is a very significant requirement of any proposed solution for a large PSAP like Fairfax County since getting the proper help, to the proper location, in the most efficient way possible, is a vital public interest. Some of the other options the Commission proposed for non-NG911-capable PSAPs, such as the Text-to-Relay Center and the State/Regional Approach, involve an intermediary answering point between the texting person and the PSAP. The lack of direct communication is a significant disadvantage to those options.

The Commission's proposal to have PSAPs receive text-to-911 messages through a carrier-provided texting Web Browser interface raises a number of concerns, in part because the proposed Web Browser solution described in the Text-to-911 FNPRM is very broad, not well defined, and open to interpretation. The lack of detail makes any evaluation of this option difficult without making a number of assumptions about how it might work. However, based on the information provided, Fairfax County would not consider implementing a Web Browser solution unless the carriers provided a single texting Web Browser user interface to manage all incoming text messages from all carriers. The concept described in the Text-to-911 FNPRM where there might be multiple Web Browser user interfaces open on a single desktop (i.e., one from AT&T, another from Verizon, etc.) that a call taker would need to monitor and respond to

is not a workable proposal for providing emergency response services. From a public safety and liability standpoint, there would need to be only one texting Web Browser user interface in use per call taker that would manage the text conversations surrounding the emergency event underway. The texting browser interface should provide the capability to merge "recent" related text messages from the person doing emergency texting for call taker monitoring and response. The user interface should not give rise to a situation where multiple call takers are dealing with disparate segments of texting messages from the same person while no single call taker is able to see the entire conversation in context from one display screen. The pieces or segments of text conversation should be folded into one dialogue stream that a call taker can manage and respond to in an organized, time sequenced manner. Telephone calls have very defined start and end points whereas text messages, by their very nature, do not have such clearly defined start and end points. The user interface would need to help distinguish for the PSAP when a text-to-911 message is a different conversation than any "recent" text message conversations that a user has had with the PSAP. One method of distinguishing different conversations would be to use the commonly available text-to-email capabilities of Short Message Service ("SMS") messaging to manage the disparate text messaging conversations in a controlled manner. Such an approach would involve the PSAP using a non-published, difficult to guess email address that is specifically assigned to receive text-to-911 messages at the PSAP.

Another consideration for the Web Browser approach is how the text conversations would be stored for legal record keeping purposes (what systems would be provided to record the conversations from the web server and allow searching and archiving of the conversations for subsequent retrieval). If Fairfax County were to implement the texting Web Browser approach, text conversations would be placed on County-provided web servers outside the closed network

(e.g., Vesta being the closed network for Fairfax County) currently used for call management. While there would be security systems and firewalls in place for the web servers that store text-to-911 messages, the level of security would be slightly less than what is currently provided under the Text-to-TTY approach which runs on the closed Vesta network. Implementing a texting Web Browser approach also would introduce new business processes and controls for an administrative workstation that is separate and distinct from the workstations that are used today to process and enter TTY calls for service in the Operations Center. This change would require new standard operating procedures and additional training requirements for all call takers and supervisors.

Also, the PSAP operations directors would need to determine how to deploy the web user interface on the operations floor. Would only a subset of call taking positions be configured with the texting Web Browser interface to receive and process text-to-911 messages (for cost or other technical considerations)? Or would the texting Web Browser capability be implemented at each call taking workstation? If only implemented at a subset of workstations, would that increase the possibility of text-message waiting queues occurring while other call takers at workstations not configured with the Web Browser interface are idle but unable to process the text call? The County cannot determine how it would implement this approach without more details on how the proposed Web Browser solution would operate.

If Fairfax County were to implement the Web Browser approach, it would need to run on Internet Explorer (currently operating on Version 8) and the provided solution must not include any Java applets, as Java presents security issues for the County's network infrastructure. Without additional details of the texting Web Browser approach, Fairfax County cannot currently evaluate the full impact on its equipment and network infrastructure of the

Commission's proposed solutions, as the Text-to-911 FNPRM requests, from a cost and technology perspective.

PSAPs generally would likely encounter additional costs in implementing the Web Browser text-to-911 proposed solutions in areas such as: trunk lines dedicated to receive text-to-911 messages, upgrades to current administrative computer workstations in memory and storage capacity to operate in a production mode rather than an administrative capacity, installation of dedicated text-to-911 web servers to allow storage and efficient management of text-to-911 messages, and addition of technical support man hours for troubleshooting new production systems and environments. The Web Browser text-to-911 proposed solution would also require cyclical replacement of administrative workstations on a slightly more frequent basis due to increased use in a production environment, thus increasing replacement costs. Software of some type would be required to allow the text messages to be recorded in a centralized location, retrieved on an as-needed basis for investigations by the archivist and supervisors, and archived in accordance with legal requirements (similar to the requirements to store call details for ten years). In addition, software procedures to easily transfer copies of any misdirected text messages to another jurisdiction probably would be necessary.

II. Accuracy of Text Message Location Data.

Fairfax County does not support the Commission's proposal to require only coarse location information (the equivalent of a Phase I cell sector location) to be automatically provided with a text-to-911 message during the initial implementation of text-to-911. (Text-to-911 FNPRM ¶¶ 121-123.) Allowing text-to-911 service providers to pass only coarse location for text-to-911 messages is a reversion back to a lower standard for location accuracy than what is required today with wireless calls. A coarse location will not normally be precise enough to

allow emergency service responders to find the person needing help without searching wide geographic areas, introducing significant delays in providing help. Fairfax County assumes that there will not be a capability to do rebids on locations for texters to attempt to obtain Phase II location data, as that was not mentioned in the Text-to-911 FNPRM.

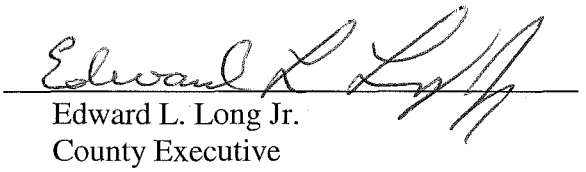
Fairfax County strongly advocates that location information provided with text-to-911 messages should be equivalent to E-911 Phase II location data, as is required for wireless calls. Phase II location data can be within a minimum of 50-150 meters of accuracy and even greater precision depending on the handset or mobile device in use. The County recognizes that the Commission's proposal resulted from balancing the technical difficulties and cost of requiring compliance with the Phase II location accuracy rules against the benefits of enabling consumers to send text messages to 9-1-1 in the near term. However, from the PSAP perspective it is critical that persons in situations where they can only provide minimal information in their text-to-911 have confidence that the PSAP will be able to pinpoint a response location. At a minimum, the County urges the Commission to define what is "the initial implementation of text-to-911" during which E-911 Phase II location data will not be required. (See Text-to-911 FNPRM ¶ 123.) The Commission should not indefinitely allow the minimum standard of coarse locations and rely on voluntary development of automatic location solutions that provide greater accuracy. A higher standard can appropriately be put in place in the near future as carriers make appropriate investments in improved text positioning software and equipment.

III. Conclusion.

Fairfax County supports the Commission in its efforts to provide text-to-911 to all communities in a manner that gives people the opportunity to reach emergency services using all the capabilities of the communications devices they have at their disposal. As the Commission

gathers comments from the various parties that respond to the text-to-911 and NG911 efforts the Commission is addressing, Fairfax County looks to the Commission to have the service providers share additional details on the approaches and solutions under consideration so that the PSAPs can undertake effective, coordinated, and timely planning to implement text-to-911 when their operational environments are ready to receive text-to-911 messages. Eventually, most, if not all, PSAPs will make the decision to receive text messages, at a time when their equipment is upgraded and their personnel are ready to begin processing text message calls. We look forward to continued involvement in these endeavors and look toward opportunities to provide further input to these industry efforts.

Respectfully submitted,



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